DOCUMENT RESUME

ED 267 290 CE 043 996

AUTHOR Walters, Norma J.; And Others
TITLE Attitudes toward Disabled Persons as Perceived by Health Occupations Classroom Teachers.
PUB DATE Apr 86
NOTE 20p.; Paper presented at the National Health Occupations Education Research Conference (1st, Auburn, AL, April 11-13, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Allied Health Occupations Education; *Attitude Change; Attitude Measures; *Disabilities; *Inservice Teacher Education; *Outcomes of Education; Program Effectiveness; Secondary Education; *Teacher Attitudes; Teacher Education; Teaching Methods; Vocational Education Teachers

ABSTRACT

The effects of different instructional strategies and selected demographic variables on experienced health occupations teachers' attitudes toward disabled persons were studied. A pretest/posttest experimental design was used with three groups of randomly assigned participants. The treatment consisted of instruction by independent study, lecture, and film on identical information pertaining to disabled persons. Mulitvariate analysis of variance of scores on the Attitudes toward Disabled Persons Scale produced no significant sources although proportions of variance accounted for by the subscale scores were .89 for "personality characteristics subscale," .85 for "special treatment subscale," and .93 for "disabled in school subscale." A sequential partitioning of the sums of squares in univariate analyses was performed. There were pretest-posttest differences and differences related to varying years of occupational experience, to number of courses studied, to years of teaching experience, and to highest degree attained. Analyses of variance showed no significant differences between the three different methods of instruction. Other findings revealed that special coursework taken to teach handicapped students contributed to a positive attitude toward disabled students. It is suggested that states continue to require special preparation for all teachers who teach handicapped students. (Author/KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED267290

Attitudes Toward Disabled Persons

As Perceived By Health Occupations

Classroom Teachers

Norma J. Walters, R.N., Ph.D.
Assistant Professor & Coordinator
Health Occupations Education
College of Education
Auburn University
Auburn, Alabama 36830
Telephone: Office (205) 826-5320
Home (205) 887-8059

S. Tracy Trussell, Ph.D.
Assistant Professor
Department of Vocational and Adult Education
College of Education
603 Aderhold Hall
University of Georgia
Athens, Georgia 30602
Telephone: Office (404) 542-1206
Home (404) 548-7506

James Noel Wilmoth, Ph.D.
Associate Professor
Foundations of Education Department
College of Education
Auburn University
Auburn, Alabama 36830
Telephone: Office (205) 826-4457
Home (205) 821-1731

Fred T. Walters, M.Ed.
Melbourne High School
305 Banyan Way
Melbourne Beach, Florida 32951
Telephone: Home (305) 727-1309

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

N J Walters

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Paper Presented at the First National Health Occupations Education Research Conference, Auburn University, April 11-13, 1986

CE043996

Attitudes Toward Disabled Persons As Perceived by Health Occupations Classroom Teachers

Norma J. Walters

S. Tracy Trussell

James Noel Wilmoth

Fred T. Walters

Abstract: The purpose of the research was to study the effects of different instructional strategies and selected demographic variables on experienced health occupations teachers' attitudes toward disabled persons. A pretest/posttest experimental design was utilized with three groups of randomly assigned participants. The treatment consisted of instruction by independent study, lecture, and film on identical information pertaining to disabled persons. Manova produced no significant sources although proportions of variance accounted for by the sub-scale scores were .89 for "Personality Characteristics Sub-scale," .85 for "Special Treatment Sub-scale," and .93 for "Disabled in School Sub-scale." A sequential partitioning of the sums of squares in univariate analyses was performed. There were pretest-posttest differences; differences due to varying years of occupational experience, to number of courses studied, to years of teaching experience, and to highest degree attained. Analyses of variance showed no significant differences between the three different methods of instructional strategies. Other findings revealed that special coursework taken to teach handicapped students contributed to a positive attitude toward disabled students. It is suggested that

states continue to require special preparation for all teachers who teach handicapped students.

Public Law 94-142 calls for handicapped children to be educated whenever appropriate with non-handicapped children. This policy depends on local educators and administrators to make the determination of appropriate placement with the child's parents. The education of administrators and teachers must prepare them to participate meaningfully in this process (Martin, 1978).

Numerous studies have been completed that attest to the need for improvement of inservice vocational development in the area of serving handicapped youth (Brolin, 1976, Faulkner, 1975, Gearhart, 1976, & Wall, 1976). Most states have provided special inservice, workshops, or other means to provide teachers training in this problem area. Although approximately 70% of all children identified as handicapped spend some portion of their school day in regular classrooms (Lakin, 1983) insufficient studies have been conducted to determine teacher attitudes toward the handicapped or to evaluate the best means to provide inservice education concerning education of the handicapped in the regular educational setting (Iverson & Davis, 1981).

Hughes (1978) felt that given proper information and training teachers would develop a more positive attitude toward the handicapped student. Donaldson and Martinson (1977) found that preservice teachers' attitudes toward handicapped students were improved by exposing the teachers while they were in training to situations involving disabled students. Higgs

(1975) also found that a combination of information and contact with a handicapped person were of great benefit in improving a teacher's understanding and attitude.

In 1979, Bruwelheide wrote: "The greatest barriers may be those which are not immediately seen, those of administrator and teacher attitude, anxiety, and non-understanding of the handicapped individual" (p. 5). Traditionally, health care professionals have been prepared for engaging in treatment of medical needs of clientele groups that may have included handicapped persons. This study focuses on health care professionals engaged in providing education and training to handicapped students preparing for entry into health careers. In particular, this study is concerned with attitude toward handicapped students.

Since public education has only recently opened for health occupations courses and since the teachers of those courses may not be well prepared to serve handicapped students who have chosen these programs, a study of attitudes might be helpful for understanding classroom environments in which handicapped students may find themselves. Should those environments be less than desirable, such a study might also suggest areas for additional professional preparation for health occupations teachers. Moreover, among other studies, the International Association for Evaluation of Achievement in Education study of classroom environments has demonstrated that the teacher is a very important contributor to variance in student achievement (Regan & Anderson, 1984).

Purpose of the Study

The primary purpose of this study was to apply a popular measure of attitude toward handicapped persons of experienced health occupations education teachers and to determine whether those attitudes are malleable under different limited instructional strategies. The secondary purpose of this study was to determine what relationships exist between selected demographic variables and observed differences in teacher attitude toward handicapped persons.

Methodology

Secondary school Health Occupations teachers employed in vocationally reimbursed programs as instructors in allied health cluster curriculum (multiple-competency) programs were participants in this study. These experienced health occupations teachers, with educational backgrounds in medical technology, pharmacy, respiratory therapy, dental assisting, and registered nursing, were randomly assigned to three groups and the groups were randomly assigned treatment in a one-hour session which consisted of self-paced independent study (n = 15), lecture with discussion (n = 14) and a film (n = 15), all with identical conceptual content dealing with problems and needs of physically disabled persons. Conceptual content for the three sessions was controlled by the film, The Invisible Barrier (Disability Information Center) which was used unedited. A self-paced instructional module for independent study was constructed from the verbal and visual conceptual content of the film. A narrative transcription of the film for traditional lecture was developed with supplemental verbal descriptions of those concepts visually presented. Three weeks prior to an annual summer

professional development workshop for all high school health occupations teachers, pretests were mailed to the teachers with a request for their participation in the study. Sixty-two percent of the teachers volunteered to be included in the study as a part of their three-day workshop. No other session related to the handicapped was held. The three groups were treated in regular classrooms at the workshop site. The three treatments occurred simultaneously under supervision of three professional educators. Educators in the film and independent study groups assured that participants attended to the task. The educator in the lecture group presented the lecture. There was a prior meeting of the three educators who facilitated the treatments to discuss procedures that would ensure effective control for the three presentations to be as identical as possible.

Posttest data collection was completed immediately following the one-hour treatment session. After the data were collected, the purpose of the study was explained to all participants.

In order to guide the study, three null hypotheses were generated and tested:

Ho_1 The scores of health occupations teachers will not differ significantly from neutral (item means equal to 3) on the Attitudes Toward Disabled Persons (ATDP) instrument.

Ho_2 There will not be a significant difference between the three methods of instructional strategies (independent study, lecture, and film) in causing modification of health occupations teachers' attitudes toward the disabled as measured by the ATDP instrument.

Ho_3 The pretest/posttest ATDP scores among health occupations teachers will not differ statistically for selected demographic variables.

Instrumentation

A validated attitude assessment, "Attitudes Toward Disabled Persons" (ATDP) was selected for the study (Yuker, Block & Campbell, 1960). The original instrument contained 30 items in two sub-scales. Five items relating to vocational education were added to the ATDP instrument by Iverson and Davis (1981) in order to clarify views of the teachers toward specific educational situations. The revised 35-item ATDP instrument has three sub-scales. The Personality Characteristic Sub-scale has 19 items specifically referring to similarities or differences in Personality Characteristics of disabled persons. The Special Treatment Sub-scale has 11 items dealing with the special treatment of disabled persons. Five of the items refer to special treatment in educational situations and these five items comprise the Disabled in School Sub-scale. The ATDP instrument uses a 1-5 Likert scale, with 1 being strongly disagree and 5 being strongly agree. The sense of scaling for some of the Likert items was reversed before those items were accumulated into sub-scale scores in the multivariate analyses. Missing data from individual response categories were eliminated in the data analysis by listwise deletion in the GLM procedure of SAS. Listwise deletion resulted in the loss of seven cases for a final n of 81.

Reliabilities of the instrument in this study ranged from .93 for all 35 items to .78 for the five-item Disabled in School Sub-scale using Cronbach's Coefficient Alpha. Content validity has been established by

comparisons with other studies (Trussell, N. J. Walters, Davis, Avery, F. T. Walters, & Williams, 1984).

Results

Table 1 summarizes pretest and posttest response means for the three sub-scales of the ATDP. The overall pretest mean for the Personality Characteristic Sub-scale was 54.11 (SD = 4.45), for the Special Treatment Sub-scale was 29.87 (SD = 2.30), and for the Disabled in School Sub-scale was 18.07 (SD = 3.44). Pretest means for the Personality Characteristic Sub-scale broken down by categories of the independent variables ranged from 45.00 to 58.00, for the Special Treatment Sub-scale from 25.50 to 33.00, and for the Disabled in School Sub-scale from 11.00 to 23.00.

The overall posttest mean on the Personality Characteristic Sub-scale Posttest mean was 53.81 (SD = 4.60) while means for the same sub-scale broken down by categories of the independent variables ranged from 44.00 to 58.00. The Special Treatment Sub-scale Posttest mean was 29.93 (SD = 2.52) and its breakdown of means ranged from 26.00 to 36.00. The Disabled in School Sub-scale Posttest mean was 18.93 (SD = 2.77) with breakdowns ranging from 11.00 to 25.00.

Manova procedures for Personality Characteristics, Special Treatment, and Disabled in School Sub-scales by Type of Score (observed vs. chance or neutral) indicated a difference in location for the two types. On the pretest, Wilk´s Lambda was .44 ($p < .05$) and the posttest Wilks Lambda was .45 ($p < .05$). The univariate analysis revealed a significant F value for each of the three sub-scales. Therefore, null hypothesis one was rejected. The Personality Characteristics Sub-scale F value was 18.53 ($p < .05$) on the

Table 1

ATDP Scores Broken Down by Levels of Variables in the GLM Models

Source	N	ATDP Sub-scales											
		Personality Characteristics (19 items)				Special Treatment (11 items)				Disabled in School (5 items)			
		Pretest		Posttest		Pretest		Posttest		Pretest		Posttest	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Total Sub-scale Response	44	54.11	4.45	53.81	4.60	29.87	2.30	29.93	2.52	18.07	3.44	18.93	2.77
Group 1 (independent study)	15	53.60	4.63	53.27	5.16	29.87	2.59	28.60	2.72	18.20	3.36	19.13	3.68
Group 2 (lecture)	14	54.00	4.57	54.07	4.23	29.79	1.76	30.57	2.21	17.71	4.25	18.71	1.98
Group 3 (film)	15	54.73	4.38	54.14	4.62	30.00	2.59	30.71	2.13	18.27	2.84	18.93	2.50
Handicapped Family Member													
YES	9	54.33	4.00	53.92	2.71	30.11	1.69	30.42	2.02	17.78	3.53	18.67	2.64
NO	35	54.06	4.61	53.78	5.19	29.83	2.46	29.74	2.70	18.14	3.47	19.03	2.86
Occupational Experience													
None	4	55.00	6.83	56.00	6.08	29.00	1.41	27.67	2.89	15.50	4.65	18.00	3.61
1-4 years	5	50.80	5.40	51.50	5.89	31.80	1.79	30.83	2.64	21.60	1.67	20.17	1.72
5-10 years	17	55.12	4.28	53.07	5.13	29.65	2.74	29.67	2.74	17.65	3.18	18.73	3.20
Over 10 years	17	53.76	3.70	54.72	3.43	29.76	2.05	30.17	2.26	17.94	3.31	18.78	2.71
Special Coursework to Teach Handicapped Students													
YES	35	53.89	4.28	56.94	4.54	29.89	2.35	29.76	2.41	18.31	3.29	19.33	2.77
NO	9	55.00	5.22	53.22	5.31	29.89	2.26	30.44	3.09	17.11	4.04	17.89	2.42
Number of Special Courses Taken													
One course	21	54.14	4.66	54.00	4.34	29.71	2.28	29.50	2.07	18.81	2.82	19.78	1.73
Two courses	7	54.00	3.96	54.13	4.52	30.86	2.61	30.13	3.00	17.86	3.67	18.38	3.07
Three courses	2	56.00	2.83	44.00	----	27.00	2.83	28.00	----	16.50	6.36	25.00	----
Four courses	1	58.00	----	58.00	----	33.00	----	35.00	----	11.00	----	11.00	----
Five courses	1	49.00	----	54.00	----	30.00	----	31.00	----	21.00	----	21.00	----
Ten courses	1	49.00	----	49.00	----	29.00	----	29.00	----	21.00	----	20.00	----
Eleven courses	1	52.00	----	52.00	----	26.00	----	26.00	----	22.00	----	22.00	----

BEST COPY AVAILABLE

Table 1 (continued)

Source	N	ATDP Sub-scales											
		Personality Characteristics (19 items)				Special Treatment (11 items)				Disabled in School (5 items)			
		Pretest		Posttest		Pretest		Posttest		Pretest		Posttest	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Teaching Experience													
First year	2	56.00	8.49	56.00	8.49	30.50	2.12	30.50	2.12	18.50	4.95	18.50	4.95
1-4 years	19	54.00	5.29	53.26	5.46	29.26	2.64	29.32	2.21	18.68	3.32	19.32	2.87
5-10 years	18	55.22	2.49	55.00	3.67	30.39	2.06	30.24	2.61	17.28	2.95	18.47	2.98
Over 10 years	5	49.80	3.42	52.43	3.99	30.20	1.79	30.86	3.02	18.40	5.46	19.00	2.08
Experience Teaching Handicapped													
YES	37	53.78	4.34	54.06	4.72	29.95	2.36	30.14	2.44	18.00	3.67	18.89	2.78
NO	7	55.86	4.95	52.57	4.04	29.57	2.15	28.86	2.85	18.43	1.99	19.14	2.97
Highest Degree Earned													
Associate Arts	2	54.00	4.24	58.00	----	25.50	0.71	28.00	----	18.50	0.71	17.00	----
Bachelor's	15	55.20	4.59	54.08	5.45	29.80	2.86	30.38	2.29	16.40	3.60	18.46	3.23
Master's	11	54.18	4.75	54.92	3.50	30.00	2.00	29.62	2.60	18.27	2.83	18.85	2.76
AA Certification (Specialist)	1	45.00	----	45.00	----	32.00	----	36.00	----	23.00	----	19.00	----
Doctorate	2	50.00	1.41	52.00	----	30.50	0.71	29.00	----	20.50	0.71	18.00	----
Other	10	52.90	3.38	52.55	4.55	30.60	1.43	29.45	2.62	20.30	2.83	19.[illegible]	3.01

pretest and 20.79 ($p < .05$) on the posttest when the respondents' scores were compared with the neutral score. The F values on the Special Treatment Sub-scale were 80.30 ($p < .05$) on the pretest and 66.98 ($p < .05$) on the posttest. The pretest F value was 35.01 ($p < .05$) and the posttest F value was 85.28 ($p < .05$) on the Disabled in the School Sub-scale. These results are summarized in Table 2.

Analysis with general linear model procedures employing selected demographic variables in addition to Pretest/Posttest Type and Group indicated that the models overall were satisfactory, accounting for between about .85 (for Special Treatment) and .94 (for Disabled in School) of observed variabilities. However, because of multicollinearity in the data, the completely partialled variables uniquely did not account for significant proportions of variability. Therefore the second and third null hypotheses were not rejected.

The procedure of choice for responding to the multicollinearity problem with these data was to assign the variability sequentially. The Pretest/Posttest Type and Group were entered first and second because of their potential contributions to the stated purposes of this study. It was reasoned that the presence of a handicapped family member might enhance favorable attitudes toward the handicapped. This experience would have preceeded all occupational and educational experiences, thus "Handicapped Family Member" was entered third.

For health occupations teachers the usual mode for entry into the professions is through completion of a health care training program. Subsequent to this the prospective teacher either would enter the teaching

Table 2

Analyses of Observed vs Chance Results of ATDP Data

Multivariate

Source	Wilk's Lambda	F_a	Numerator df	Denominator df	p
Pretest	.44	35.88	3	84	0.0001*
Posttest	.45	34.50	3	84	0.0001*

Univariate ATDP Sub-scales

		Personality Characteristics (19 items)					Special Treatment (11 items)					Disabled in School (5 items)				
Source	df	M	SS	MS	F	P	M	SS	MS	F	P	M	SS	MS	F	P
Pretest																
Observed Raw Score		54.11					29.89					18.07				
Expected Mean		57.00					33.00					15.00				
Model	1		183.28	183.28				213.28	213.28				207.10	207.10		
					18.53	0.0001*				80.30	0.0001*				35.01	0.0001*
Error	86		850.83	9.89				228.43	2.66				508.80	5.92		
Total	87		1033.72					441.72					715.90			
Posttest																
Observed Raw Score		53.86					29.84					18.86				
Expected Mean		57.00					33.00					15.00				
Model	1		216.41	216.41				219.56	219.56				328.41	328.41		
					20.79	0.0001*				66.98	0.0001*				85.28	0.0001*
Error	86		895.18	10.41				281.89	3.28				331.18	3.85		
Total	87		1111.59					501.44					659.59			

*Significant at alpha = .05 level

Note: Neutral response equals number of items in each sub-scale multiplied times 3.

profession directly or would attain varying levels of educational proficiency, then enter the teaching profession. Therefore, "Years of Occupational Experience" was entered fourth. "Courses" (had or did not have special courses for teaching the handicapped) and "Number of Courses" (special courses) were then entered fifth and sixth into the model.

Teaching experiential variables were entered seventh following the special coursework because of the requirement for coursework in the teacher certification process. The act of having taught a handicapped student would be more likely with increase in the number of years of teaching experience. Finally, "Highest Degree Earned" was added since it is an important variable for determining compensation and status for practicing teachers.

The univariate analysis shown in Table 4 post hoc to the multiple analysis of variance procedure, Table 3, indicated that years of occupational experience, number of special courses taken to teach handicapped students, years of teaching experience, and highest degree earned contributed significantly to the explanation of variance on the Personality Characteristic Sub-scale (Model $F = 2.73$, $p < .05$). On the Disabled in School Sub-scale the pretest/posttest effect, years of occupational experience, special coursework taken, number of special courses taken, and highest degree earned explained a significant amount of the variance (Model $F = 4.82$, $p < .05$). The model for the univariate analysis on the Special Treatment Sub-scale was not significant (Model $F = 1.87$, $p < .06$). However, years of occupational experience was significant ($F = 3.45$, $p < .03$).

From the table of means it may be observed that the posttest scores were higher ($\underline{m}$ = 18.93) than the pretest scores ($\underline{m}$ = 18.07) on the Disabled in School Sub-scale. Scheffé post hoc testing revealed that participants with one to four years of occupational experience responded significantly higher ($\underline{m}$ = 21.60) than teachers with no occupational experience ($\underline{m}$ = 15.50), with five to 10 years occupational experience ($\underline{m}$ = 17.65), and with over 10 years of occupational experience ($\underline{m}$ = 17.94) on the Disabled in School Sub-scale. In addition, teachers that had taken one special course to teach handicapped students ($\underline{m}$ = 18.81) responded more positively than teachers who had taken two special courses ($\underline{m}$ = 17.86).

On the Personality Characteristic Sub-scale, teachers with five to 10 years teaching experience were significantly more positive ($\underline{m}$ = 55.22) than teachers with over 10 years teaching experience ($\underline{m}$ = 49.80). Also, baccalaureate ($\underline{m}$ = 55.20) and master degree ($\underline{m}$ = 54.18) teachers were more positive than specialist degree teachers ($\underline{m}$ = 45.00).

Participants who had other degrees or diplomas (such as the Associate in Science degree and the diploma nurse program leading to a licensure/certification in health care) responded more positively ($\underline{m}$ = 20.30) than did baccalaureate degree teachers ($\underline{m}$ = 16.40) on the Disabled in School Sub-scale.

While overall effects of the different teaching strategies and the selected demographic variables were not significant, the post hoc analysis has provided results that help in understanding the variance of experienced health occupations teachers' attitudes toward the handicapped.

Table 3

MANOVA for Personality, Special Treatment and Disabled in School Sub-scales

Source	Wilk's Lambda	F_a	Numerator df	Denominator df	P
Pretest/Posttest	.96	.24	3	18	.87
Group Teaching Strategy	.74	.97	6	36	.46
Handicapped Family Member	.99	.05	3	18	.98
Years of Occupational Experience	.83	.40	9	43	.93
Special Coursework	.85	1.03	3	18	.40
Number of Courses (special coursework)	.61	.82	12	47	.63
Years of Teaching Experience	.86	.31	9	43	.97
Experience Teaching Handicapped	.98	.13	3	18	.94
Highest Degree	.81	.45	9	43	.90
Pretest/Posttest by Group	.84	.56	6	36	.76

Table 4

Univariate Analyses of Scores on ATDP by Personality Characteristics, Special Treatment, and Disabled in School Sub-scales

		Personality Characteristics				Special Treatment				Disabled in School			
Source	df	SS	MS	F	P	SS	MS	F	P	SS	MS	F	P
Model	60	1495.13	24.92			413.79	6.90			729.12	12.15		
				2.73	.01*			1.87	0.06			4.82	0.00*
Error	20	182.30				73.77	3.68			50.43	2.52		
Total	80	1677.43				487.56				779.55			

*Significant at alpha = .05 level

		Personality Characteristics			Special Treatment			Disabled in School		
Source	df	Type I SS	F	P	Type I SS	F	P	Type I SS	F	P
Pretest/ Posttest	1	0.12	0.01	0.90	0.05	0.01	0.90	11.56	4.58	0.04*
Group Teaching Strategy	2	12.40	0.68	0.51	22.83	3.10	0.06	0.44	0.09	0.91
Handicapped Family Member	1	1.45	0.16	0.69	3.05	0.83	0.37	8.78	3.48	0.07
Years of Occupational Experience	3	107.01	3.91	0.02*	38.22	3.45	0.03*	84.10	11.12	0.00*
Special Coursework	1	1.87	0.21	0.65	3.50	0.95	0.34	34.80	13.80	0.00*
Number of Courses (special)	8	207.56	2.85	0.02*	69.70	2.36	0.05	205.12	10.17	0.00*
Years of Teaching Experience	3	90.77	3.32	0.04*	25.49	2.30	0.10	2.08	0.28	0.84
Experience Teaching Handicapped	1	0.02	0.00	0.96	3.01	0.82	0.37	0.61	0.24	0.62
Highest Degree	6	158.25	2.89	0.03*	31.40	1.42	0.25	107.08	7.08	0.00*
Pretest/ Posttest by Group	2	9.86		0.59	19.87	2.69	0.09	2.14	0.42	0.65
Number (group)	32	905.76	3.11	0.00	196.61	1.67	0.11	272.37	3.38	0.00
		R-Square 0.891			R-Square .849			R-Square 0.935		

*Significant at alpha = 0.05 level

Conclusions and Recommendations

The results of the study indicated that the health occupations teachers that participated responded slightly less than positive to the ATDP instrument. This finding was contrary to the findings of Trussell, Walters, et al. (1984) and Iverson and Davis (1981) using the same instrument. Therefore, further study, specifically with health occupations teachers should be conducted. A more broadly based study should be undertaken, perhaps a study involving teachers accessible through an interstate agency.

Selected demographic variables were helpful sequentially for the overall explanation of variance on the attitude of health occupations teachers toward the handicapped. Specifically, the number of years of occupational experience, special coursework taken to teach handicapped students, number of special courses taken, number of years teaching experience, and highest degree earned contributed to understanding of variance on the sub-scales of the ATDP instrument.

The finding that the health occupations teachers were slightly less positive than expected from chance answering on the Personality Characteristic Sub-scale and the Special Treatment Sub-scale may be explained by the nature of the admission requirements to enter and succeed in health careers. Another factor, which may be considered, is the concept of mainstreaming the handicapped that has increased the stress on all teachers in achieving successful placement of students regardless of ability. Therefore, it is recommended that the health occupations student be assessed for abilities needed to enter and succeed in health occupations programs. However, the Disabled in School Sub-scale scores were on the positive side of chance which

may indicate a willingness to provide for handicapped students educational opportunities appropriate for their abilities.

Other findings revealed that special coursework taken to teach handicapped students contributed to a positive attitude toward the disabled student. Therefore, it is suggested that State Departments of Education continue to require special preparation for credentialing all teachers who teach handicapped students.

References

Brolin, D. E. (1976). Vocational preparation and retarded citizens. Columbus, OH: Charles E. Merrill.

Bruwelheide, K. L. (1970). Assisting the physically handicapped: An identification and development of apparatus for laboratory shops--Phase 1. Bozeman, MT: Department of Agricultural and Industrial Education, Montana State University.

Disability Information Center. The invisible barrier [film]. Portland, Maine: Center for Research and Advanced Study.

Donaldson, J. E., & Martinson, M. E. (1977). Modifying attitudes toward physically disabled persons. Exceptional Children, 43, 337-441.

Faulkner, T. L. (1975). Handbook on implementing vocational education special needs program. Montgomery, AL: State Department of Education.

Gearhart, B. R., & Weisha, M. W. (1976). The handicapped child in the regular classroom. St. Louis, MO: C. V. Mosby.

Higgs, R. W. (1975). Attitude formation: Contact or information. Exceptional Children, 41, 496-497.

Hughes, J. H. (1978). Attitudes is keystone to success. School Shop, 37, 76-80.

Iverson, M. J., & Davis, P. D. (1981). Effects of inservice education methods on improving the attitudes of vocational agriculture teachers toward physically handicapped students. Journal of Vocational Education Research, 6(1), 1-16.

Lakin, C. K., & Reynolds, M. C. (1983). Curriculum implications of Public Law 94-142 for teacher education. Journal of Teacher Education, 34(2), 13-18.

Martin, E. W. (1978). Education of the handicapped act and teacher education. Journal of Teacher Education, 29(8).

Regan, D. W., & Anderson, L. W. (1984). Rethinking research on teaching: Lessons learned from an international study. Evaluation in Education: An International Review Series, 8(2), 83-178.

Trussell, S. T., Walters, N. J., Davis, P. D., Avery, M. R., Walters, F. T., Williams, H. N. (1984). Effects of utilizing a physically handicapping simulating device on attitudes of marketing and distributive education teachers toward disabled persons. Marketing and Distributive Educators Digest, 9(2), 35-41.

Wall, J. E. (1976). Vocational education for special groups: Sixth yearbook. Washington: American Vocational Association.

Yuker, H. E., Block, J. R., & Campbell, W. J. (1960). A scale to measure attitudes toward disabled persons. Albertson, NY: Human Resources Foundation. Study No. 5.